GD-610C Remote Ultrasonic Partial Discharge Detector

General Information

Partial discharge is one of the common reason of medium and high voltage equipment and cable insulation failures. Partial discharge testing can detect harmful defects and help identify potential future failures.

The GD-610C remote ultrasonic partial discharge detector uses an ultrasonic spectrum probe (sensor) to collect ultrasonic signals and analyze the signal to diagnose the charged detection, it is a diagnosis device for the accident of the distribution line.

The device determines the line position and the fault type of the faulty hidden line when it is live. After collecting the ultrasonic abnormal signal, it transmits signals to the host, converts it into an audible sound signal and waveform, and finally diagnoses the type of the hidden danger and grade by the analysis software. It helps inspection personnel to accurately discover the hidden troubles of the line faults and prevent the occurrence of major accidents, and avoid unnecessary power outages.

Features

- Long-distance non-contact charging detection, laser accurate positioning, maximum detection distance up to 30 meters, and support low-speed vehicle inspection. It can be tested on vehicles with a speed of 30km/h.
- Efficient "inspection qualified" type insulation state inspection tool, light weight, easy to carry, especially suitable for live detection of outdoor transmission lines.
- Handheld ultrasonic detectors with high sensitivity, strong directionality and directivity, and can accurately locate hidden faults of the line .
- The handheld ultrasonic detector can be used independently , or it can be connected to the main display wirelessly when needed.
- Flashlight-style appearance, light weight and easy to carry; host can connect with mobile phone and headset wireless, great convenient for site maintenance.
- The patrol instrument supports real-time communication with mobile phones and tablets, and can synchronize the collected real-time data to the cloud to truly realize front-end detection and rear view analysis. (some functions need to be customized)
- After the device host is connected with the mobile phone, the main interface of the APP displays the partial discharge amplitude (dB), the

time domain analysis waveform, and the partial discharge columnar statistical graph.

- The electrical equipment fault point generates a partial discharge signal, through the wireless bluetooth headset can accurately hear the fault sound in real time. The vibrational, popping, humming, and humming sounds of various features can be associated with different faults.
- The earphone can monitor and locate the partial discharge condition, and the volume of the earphone can be adjusted at any time on the mobile phone.
- Mobile phone downloads the Android APP and matches with the host, and uses the “AE Tracker” inspection background software to conveniently collect, manage and store data.
- Using rechargeable lithium battery power supply, can ensure that the equipment continues to work for more than 8 hours.
- Ultrasonic testing can be applied to the noise environment and is not affected by environmental sounds. It is an indispensable professional inspection tool for power supply line inspection personnel.
- Don’t need to be powered off during the detection process.
- It can also detect partial discharges of power equipment such as cable terminations, motors, and dry-type transformers.

Specifications

Software	
System	Android 8.0.0
Memory	4.0GB

Function	data display, chart display
Storage	64GB
Take Photo	support
Ultrasonic sensor	
Measurement range	-7dB~60dB
Resolution	1dB
Accuracy	±1dB
Sensitivity	-65dB
Sensor center frequency	40.0±1.0KHz
Sensor bandwidth	2.0KHz
Battery	
Built-in battery	Lithium battery, 8.4V, 3500mAh
Use time	About 8 hours
Charging time	Approx. 5 hours
Battery protection	Over voltage and over current protection
Battery charger	

Rated voltage	8.4V
Charging output current	2A
Working temperature	-20℃-60 ℃
Working humidity	<80%
Hardware	
Housing	Monochrome molding plastic
Screen	Wireless display (Android phone or tablet)
Control	Start/stop button
Interface	Charger interface; headphone interface;
Headphones	High fidelity noise reduction wired headset; wireless Bluetooth headset
Size	Instrument size: 380mm * 30mm Instrument box size: 395mm * 295mm * 105mm
Weight	Instrument weight: 0.5KG Instrument with box weight: 2.3KG The weight of whole set of equipment: 2.7KG
Working environment	Operating temperature: -20 ℃ ~ 50 ℃ Ambient humidity: 0-90%RH

	IP rating: 54